

## ABSTRACT

An embodiment of the present invention includes a device to alter transfer characteristics of a road departure warning installation installed on a road to a driver of a vehicle, including a rumble strip sensor to sense input from a rumble strip and an 5 adjustable vehicle component in communication with the rumble strip sensor, the adjustable vehicle component configured to automatically adjust to increase an amount of input from the rumble strip sensed by the driver. Another embodiment of the present invention includes a device to estimate lateral displacement of a vehicle based on the location of a rumble strip installed on a road with respect to the vehicle, 10 the device including a processor configured to receive four signals indicative of contact of a rumble strip with respective associated four tires of the vehicle and to estimate a lateral distance that the vehicle has traveled beyond the detected rumble strip.